



Figure 2 Echocardiogram

echocardiogram on day 9 showed a persistent small pericardial effusion.

COMMENT

Meningococcal disease (infection with *Neisseria meningitidis*) presents with meningitis in up to 50% of cases and with septicaemia (with or without meningitis) in 5–20%.¹ According to a 1979 review by Laird *et al.*,² symptomatic pericarditis occurs in under 1% of patients with meningitis. Its rarity is confirmed by recent data from France: meningococcal pericarditis was identified in just 13 cases out of 2091 reported to the National Reference Centre for Meningococcal Disease (Paris).³ Meningococcal pericarditis can be classified into three distinct groups.⁴ Disseminated meningococcal disease with pericarditis is due to direct pericardial invasion by blood-borne *N. meningitidis*; pericarditis occurs within 7 days of infection. Isolated meningococcal pericarditis is pericardial infection without meningitis/meningococcaemia. Reactive meningococcal pericarditis is a late sequel (6–16 days) to meningococcal infection and is thought to be due to circulating immune complexes.

The patient described here comes into the first category; the blood cultures taken at presentation were probably false-negatives. In previous case reports of this association, the first manifestations were nearly always those of meningitis, pericarditis being identified later by routine electrocardiography or by detection of a pericardial rub. Chest pain is seldom a feature.² We have found only two reports of the sequence described here—pericarditis preceding widespread meningococcal disease.

A final point concerns pericarditis as a cause of raised troponin-T. This case serves as reminder that chest pain, ST changes and a positive troponin do not always signify an acute coronary syndrome.

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Bilateral spontaneous pneumothorax in a cannabis smoker

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Simultaneous bilateral spontaneous pneumothorax is a rare but serious cause of respiratory distress. A possible link with cannabis use highlights the importance of eliciting a full drug history.

CASE HISTORY

A man aged 23 came to accident and emergency in severe respiratory distress. After two weeks of cough he had become short of breath with pleuritic chest pain. There was no medical history of note and he was not on any regular medication. Later he told us he had smoked cannabis since

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Figure 1 Chest X-ray before treatment

the age of 13 and now smoked it daily. Previously he had mixed the cannabis with tobacco but increasingly he had been using it unmixed.

On examination of the chest there was decreased air entry bilaterally and the trachea was central. Oxygen saturations on 10 L/min via a reservoir bag were 60%, respiratory rate 30. Arterial blood pO₂ was 5.78 kPa, pCO₂ 9.09 kPa, pH 7.13. Mobile chest radiography showed bilateral pneumothoraces, with complete collapse of the left lung (Figure 1). After needle decompression, chest drains were inserted bilaterally, with relief of symptoms.

A subsequent high-resolution CT scan showed entirely normal lung parenchyma, mediastinum and airways. On respiratory function testing, transfer factor was normal but spirometry suggested a mild restrictive pattern (forced expiratory volume 3.0 L [63%], forced vital capacity 3.9 L [69%]) but the technician felt the tests were hampered by patient discomfort from the chest drains. There were no clinical findings suggestive of Marfan's syndrome or ankylosing spondylitis. Because of the high risk of further pneumothoraces he was transferred to a specialist centre for pleurodesis, from which he discharged himself without having the operation.

COMMENT

Though cannabis (marijuana) is an illegal drug in the UK, it is widely used in the 18–25-year age group. In those who smoke it there are increasing reports of detrimental effects on the respiratory tract.¹ An association between spontaneous pneumothorax and pneumomediastinum with

marijuana has previously been described.^{2,3} A suggested mechanism is coughing while breath-holding in inspiration, for example, after taking a draw on a 'joint'.³ Perhaps this was the explanation in the present case.

Cannabis apart, the risk of pneumothorax seems to be increased by tobacco smoke,⁴ and the two may be synergistic.³ Our patient was unusual in not regularly mixing them. The separate influence of cannabis is hard to investigate; moreover, patients may be reluctant to disclose information about use of other illicit drugs. For example, bilateral pneumothorax has been reported after cocaine smoking.⁵

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Optic neuropathy and orbital inflammatory mass after wasp stings

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A very rare sequela to bee or wasp stings is optic neuropathy. Goldstein *et al.* reported the first bee-associated case in 1960¹ and we have found only two in connection with wasp stings.

CASE HISTORY

A previously healthy woman of 74 years sustained several paper wasp (*Polistes humilis*) stings to her left periorbital region

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